

**Amendments to the Claims:**

The following listing of claims replaces all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-11. (canceled)

12. (new) A method for producing a resin-made, multichannel, optical path changing device, characterized in comprising six steps of:

- 1) forming a film of a sacrifice layer on a temporary substrate;
- 2) forming a film of a cladding layer thereon and selectively etching the cladding layer, thereby forming a parallelepiped block by the cladding resin;
- 3) forming a film of a core layer by a core resin to cover the block;
- 4) simultaneously forming a multichannel core having a core perpendicular to the substrate and a core parallel with the substrate, which are monolithically formed, by selectively etching the core layer and the block, and conducting a filling with a cladding resin;
- 5) forming a V-groove at a corner portion of the core in order to form a mirror surface and forming a reflecting film as the mirror surface; and
- 6) conducting a filling with a cladding resin, attaching a substrate thereon, and, after removing the temporary substrate and the sacrifice layer of the step 1), conducting a cutting and separation into multichannel optical path changing devices.

13. (new) A method for producing a resin-made, multichannel, optical path changing device, characterized in comprising eight steps of:

- 1) forming a film of a sacrifice layer on a first temporary substrate;
- 2) forming a film of a cladding layer thereon;
- 3) further forming a film of a core layer thereon and selectively etching the core layer, thereby forming a parallelepiped block by the core resin;
- 4) forming a film of a cladding layer by a cladding resin to cover the block;
- 5) simultaneously forming a multichannel core having a core perpendicular to the substrate and a core parallel with the substrate, which are monolithically

formed, by selectively etching the core layer and the block, and conducting a filling with a cladding resin;

6) attaching a second temporary substrate to an opposite surface of the first temporary substrate of the step 1) and removing the first temporary substrate and the sacrifice layer;

7) forming a V-groove at a corner portion of the core in order to form a mirror surface and forming a reflecting film as the mirror surface; and

8) conducting a filling with a cladding resin, attaching a substrate thereon, and, after removing the second temporary substrate of the step 6), conducting a cutting and separation into multichannel optical path changing devices.

14. (new) A method for producing a resin-made, multichannel, optical path changing device, characterized in comprising eight steps of:

1) forming a film of a sacrifice layer on a first temporary substrate;

2) forming a film of a cladding layer thereon;

3) further forming a film of a core layer thereon and selectively etching the core layer, thereby forming an L-shaped block by the core resin;

4) filling an etched portion of the step 3) with a cladding resin;

5) simultaneously forming a multichannel core having a core perpendicular to the substrate and a core parallel with the substrate, which are monolithically formed, by selectively etching the core layer and the block, and conducting a filling with a cladding resin;

6) attaching a second temporary substrate to an opposite surface of the first temporary substrate of the step 1) and removing the first temporary substrate and the sacrifice layer;

7) forming a V-groove at a corner portion of the core in order to form a mirror surface and forming a reflecting film as the mirror surface; and

8) conducting a filling with a cladding resin, attaching a substrate thereon, and, after removing the second temporary substrate of the step 6), conducting a cutting and separation into multichannel optical path changing devices.